AMENDMENTS TO THE CLAIMS

42. (currently amended) A method for operating a food waste disposer to process food waste, the food waste disposer having a motor for imparting movement to a rotatable shaft which is coupled to a grinding mechanism, the method comprising sequentially

rotating the grinding mechanism at a first rotational speed for a first predetermined period of time; and

rotating the grinding mechanism at a second rotational speed for a second predetermined period of time.

43. (previously presented) The method of claim 42, wherein the motor is a switched reluctance motor.

44. (previously presented) The method of claim 42, wherein the motor is a variable speed motor.

45. (previously presented) The method of claim 42, wherein the second rotational speed is less than the first rotational speed.

46. (previously presented) The method of claim 45, wherein the first rotational speed is between 2500 and 4000 rotations per minute.

47. (previously presented) The method of claim 45, wherein the second rotational speed is less than 2500 rotations per minute.

48. (previously presented) The method of claim 42, wherein the second rotational speed is greater than the first rotational speed.

49. (previously presented) The method of claim 42, further comprising rotating the grinding mechanism at a third rotational speed for a third period of time.

50. (previously presented) The method of claim 49, wherein the first rotational speed is greater than the second rotational speed, and the second rotating speed is greater than the third rotational speed.

51. (previously presented) The method of claim 50, wherein the third rotational speed is between 100 and 1500 rotations per minute.

52. (previously presented) The method of claim 49, wherein the first rotational speed is less than the second rotational speed, and the second rotational speed is greater than the third rotational speed.

53. (previously presented) The method of claim 52, wherein the first and third rotational speeds are equal.

54. (previously presented) The method of claim 42, wherein the grinding mechanism comprises a shredder plate.

55. (previously presented) The method of claim 54, wherein the shredder plate includes grinding lugs.

56. (previously presented) The method of claim 42, wherein the motor is positioned in a motor housing section and wherein the grinding mechanism is positioned in a grinding section, and wherein the motor housing section and the grinding section are adjacent.

57. (previously presented) The method of claim 56, wherein the grinding section further comprises a stationary shedder ring.

58. (previously presented) The method of claim 56, further comprising a food conveying section adjacent to the grinding section for receiving food waste.

59. (previously presented) The method of claim 42, wherein the first and second rotational speed are controlled by a motor controller.

60. (previously presented) The method of claim 59, wherein the motor includes a stator, and wherein the motor controller is in electrical communication with the stator.

61. (previously presented) A method for operating a food waste disposer to process food waste, the food waste disposer having a motor for imparting movement to a rotatable shaft which is coupled to a grinding mechanism, the method comprising:

automatically determining the presence of food waste in the food waste disposer; and

controllably changing the rotational speed of the grinding mechanism depending on the presence of food waste in the food waste disposer.

62. (previously presented) The method of claim 61, wherein the rotational speed of the grinding mechanism is increased if food waste is present in the food waste disposer.

63. (previously presented) The method of claim 62, wherein the rotational speed of the grinding mechanism is increased from a first rotational speed to a second rotational speed.

64. (previously presented) The method of claim 63, wherein the first rotational speed is between 400 and 800 rotations per minute.

65. (previously presented) The method of claim 63, wherein the rotational speed of the grinding mechanism is subsequently decreased from the second rotational speed to the first rotational speed if food waste exists the food waste disposer.

66. (previously presented) The method of claim 61, wherein the rotational speed of the grinding mechanism is decreased if food waste is not present in the food waste disposer.

67. (previously presented) The method of claim 66, wherein the rotational speed of the grinding mechanism is decreased from a first rotational speed to a second rotational speed.

68. (previously presented) The method of claim 67, wherein the rotational speed of the grinding mechanism is subsequently increased from the second rotational speed to the first rotational speed if food waste enters the food waste disposer.

69. (previously presented) The method of claim 61, wherein the presence of food waste in the food waste disposer is determined by a motor controller.

70. (previously presented) The method of claim 69, wherein the motor further comprises a stator, and wherein the controller is in electrical communication with the stator.

71. (previously presented) The method of claim 70, wherein determining the presence of food waste in the food waste disposer comprises using the controller to monitor a current in the stator.

72. (previously presented) The method of claim 71, wherein an increase in current indicates the addition of food waste to the food waste disposer.

73. (previously presented) The method of claim 72, wherein the rotational speed of the grinding mechanism is increased in response to the increase in current.

74. (previously presented) The method of claim 73, wherein the rotational speed of the grinding mechanism is increased from a first rotational speed to a second rotational speed.

75. (previously presented) The method of claim 74, wherein the first rotational speed is between 400 and 800 rotations per minute.

76. (previously presented) The method of claim 71, wherein a decrease in current indicates the exiting of food waste from the food waste disposer.

77. (previously presented) The method of claim 76, wherein the rotational speed of the grinding mechanism is decreased in response to the decrease in current.

78. (previously presented) The method of claim 61, wherein the grinding mechanism comprises a shredder plate.

79. (previously presented) The method of claim 78, wherein the shredder plate includes grinding lugs.

80. (previously presented) The method of claim 61, wherein the motor is positioned in a motor housing section and wherein the grinding mechanism is positioned in a grinding section, and wherein the motor housing section and the grinding section are adjacent.

81. (previously presented) The method of claim 80, wherein the grinding section further comprises a stationary shedder ring.

82. (previously presented) The method of claim 80, further comprising a food conveying section adjacent to the grinding section for receiving food waste.

83. (previously presented) The method of claim 61, wherein the motor is a switched reluctance motor.

84. (previously presented) The method of claim 61, wherein the motor is a variable speed motor.

85. (currently amended) A method for operating a food waste disposer to process food waste, the food waste disposer having a food conveying section and a motor for imparting movement to a rotatable shaft which is coupled to a grinding mechanism, the method comprising sequentially

removing processed food waste from the food waste disposer; and

providing water to the grinding mechanism while controllably changing a rotational speed of the grinding mechanism, wherein the rotational speed of the grinding

mechanism is controllably increased when water is provided to the grinding mechanism.

86. (previously presented) The method of claim 85, wherein the method is performed after the food waste disposer performs an idle mode.

87. (previously presented) The method of claim 86, wherein the food waste disposer is in an idle mode for a certain period of time before performing the method.

88. (previously presented) The method of claim 85, wherein the rotational speed of the grinding mechanism is controllably increased when water is provided to the grinding mechanism.

89. (previously presented) The method of claim 88, wherein the rotational speed of the grinding mechanism is increased from a first rotational speed to a second rotational speed.

90. (previously presented) The method of claim 89, wherein the first rotational speed is between 400 and 800 rotations per minute.

91. (previously presented) The method of claim 89, wherein the second rotational speed is greater than 1500 rotations per minute.

92. (previously presented) The method of claim 85, wherein the motor is a switched reluctance motor.

93. (previously presented) The method of claim 85, wherein the motor is a variable speed motor.

94. (previously presented) The method of claim 85, wherein the food waste disposer further comprises a water inlet separate from the food conveying section, and wherein water is provided to the grinding mechanism through the water inlet.

95. (previously presented) The method of claim 94, wherein the rotational speed of the grinding mechanism is controllably changed by a motor controller.

96. (previously presented) The method of claim 95, wherein the motor comprises a stator, and wherein the motor controller is in electrical communication with the stator.

97. (previously presented) The method of claim 95, wherein the motor controller is in electrical communication with a valve, and wherein the controller provides water to the grinding mechanism through the water inlet by opening the valve.

98. (previously presented) The method of claim 88, wherein the method is performed prior to turning off the food waste disposer.

99. (previously presented) The method of claim 88, wherein the rotational speed of the grinding mechanism is increased for a predetermined period of time.

100. (previously presented) The method of claim 85, wherein the grinding mechanism comprises a shredder plate.

101. (previously presented) The method of claim 100, wherein the shredder plate includes grinding lugs.

102. (previously presented) The method of claim 85, wherein the grinding mechanism is positioned in a grinding section, and wherein providing water to the grinding mechanism while controllably changing a rotational speed of the grinding mechanism causes water to rinse the grinding section.

103. (previously presented) The method of claim 102, wherein controllably changing a rotational speed of the grinding mechanism comprises increasing a rotational speed of the grinding mechanism.

104. (previously presented) The method of claim 102, wherein the grinding section further comprises a stationary shedder ring.

105. (withdrawn) A method for operating a food waste disposer to process food waste, the food waste disposer having a motor for imparting movement to a rotatable shaft which is coupled to a grinding mechanism, the method comprising:

determining whether food waste is jammed in the grinding mechanism by monitoring a current provided to the motor; and

attempting to dislodge the jammed waste from the grinding mechanism by adjusting the torque of the rotatable shaft.

106. (withdrawn) The method of claim 105, wherein the motor is a switched reluctance motor.

107. (withdrawn) The method of claim 105, wherein the motor is a variable speed motor.

108. (withdrawn) The method of claim 105, wherein the current is provided to a stator of the motor.

109. (withdrawn) The method of claim 108, wherein it is determined that food waste is jammed in the grinding mechanism by monitoring an increase in the current.

110. (withdrawn) The method of claim 105, wherein the torque of the rotatable shaft is increased.

111. (withdrawn) The method of claim 110, wherein the torque of the rotatable shaft is increased from a first torque to a second torque.

112. (withdrawn) The method of claim 105, wherein adjusting the torque of the rotatable shaft comprises reversing the rotational movement of the rotatable shaft.

113. (withdrawn) The method of claim 105, wherein adjusting the torque of the rotatable shaft comprises sequentially adjusting the rotational movement of the rotatable shaft between a reverse rotational direction and a forward rotational direction.

114. (withdrawn) The method of claim 105, wherein the grinding mechanism comprises a shredder plate.

115. (withdrawn) The method of claim 114, wherein the shredder plate includes grinding lugs.

116. (withdrawn) The method of claim 105, wherein the motor is positioned in a motor housing section and wherein the grinding mechanism is positioned in a grinding section, and wherein the motor housing section and the grinding section are adjacent.

117. (withdrawn) The method of claim 116, wherein the grinding section further comprises a stationary shedder ring.

118. (withdrawn) The method of claim 116, further comprising a food conveying section adjacent to the grinding section for receiving food waste.

119. (previously presented) A method for operating a food waste disposer to process food waste, the food waste disposer having a motor for imparting movement to a rotatable shaft which is coupled to a grinding mechanism, the method comprising controllably increasing the rotational speed of the grinding mechanism to a predetermined rotational rate over a predetermined period of time.

120. (previously presented) The method of claim 119, wherein the motor is a switched reluctance motor.

121. (previously presented) The method of claim 119, wherein the motor is a variable speed motor.

122. (previously presented) The method of claim 119, wherein the grinding mechanism comprises a shredder plate.

123. (previously presented) The method of claim 122, wherein the shredder plate includes grinding lugs.

124. (previously presented) The method of claim 119, wherein the predetermined rotational rate is greater than 1500 rotations per minute.

125. (previously presented) The method of claim 119, wherein the predetermined period of time is greater than three seconds.

126. (previously presented) The method of claim 119, wherein the rotational speed of the grinding mechanism is controllably increased from a stationary position.

127. (previously presented) The method of claim 119, wherein the motor is positioned in a motor housing section and wherein the grinding mechanism is positioned in a grinding section, and wherein the motor housing section and the grinding section are adjacent.

128. (previously presented) The method of claim 127, wherein the grinding section further comprises a stationary shedder ring.

129. (previously presented) The method of claim 127, further comprising a food conveying section adjacent to the grinding section for receiving food waste.

130. (previously presented) A method for operating a food waste disposer to process food waste, the food waste disposer having a variable speed motor for imparting movement in a first direction to a rotatable shaft which is coupled to a grinding mechanism, the method comprising controllably varying the rotational speed of the grinding mechanism in the first direction during the operation of the food waste disposer.

131. (previously presented) The method of claim 130, wherein the motor is a switched reluctance motor.

132. (previously presented) The method of claim 130, wherein the food waste disposer further comprises a motor controller, and wherein the motor controller controllably varies the rotational speed of the grinding mechanism during the operation of the food waste disposer.

133. (previously presented) The method of claim 132, wherein the motor further comprises a stator, and wherein the motor controller sends a current to the stator to controllably vary the rotational speed of the grinding mechanism during the operation of the food waste disposer.

134. (previously presented) The method of claim 130, wherein controllably varying the rotational speed of the grinding mechanism during the operation of the food waste disposer comprises increasing the rotational speed from a first rotational speed to a second rotational speed.

135. (previously presented) The method of claim 130, wherein controllably varying the rotational speed of the grinding mechanism during the operation of the food waste disposer comprises decreasing the rotational speed from a first rotational speed to a second rotational speed.

136. (previously presented) The method of claim 130, wherein controllably varying the rotational speed of the grinding mechanism during the operation of the food waste disposer comprises controllably increasing the rotational speed over a predetermined period of time.

137. (previously presented) The method of claim 136, wherein the rotational speed is increased from a first rotational speed to a second rotational speed.

138. (previously presented) The method of claim 136, wherein the rotation speed is increased from a stationary position to a first rotational speed.

139. (previously presented) The method of claim 130, wherein controllably varying the rotational speed of the grinding mechanism during the operation of the food waste disposer comprises varying the rotational speed in accordance with the presence of food waste in the food waste disposer.

140. (previously presented) The method of claim 139, wherein the rotational speed is increased when food is present in the food waste disposer.

141. (previously presented) The method of claim 130, wherein controllably varying the rotational speed of the grinding mechanism during the operation of the food waste disposer comprises varying the rotational speed when water is introduced onto the grinding mechanism to rinse the grinding mechanism.

142. (previously presented) The method of claim 141, wherein the rotational speed is increased when water is introduced onto the grinding mechanism.

143. (previously presented) The method of claim 142, wherein the method is performed prior to shutting off the food waste disposer.

144. (previously presented) The method of claim 130, wherein the controllably varying the rotational speed of the grinding mechanism during the operation of the food waste disposer occurs when food waste is jammed in the grinding mechanism.